Subject: Re: Calculation of median exclusive breastfeeding
Posted by anarinaldi on Wed, 03 May 2017 18:02:59 GMT
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Hello Voddo:

I use a publication of WHO: http://apps.who.int/iris/bitstream/10665/44306/1/9789241599290_eng.pdf
In the Annex 5 (page 78) there is one explanation.
I wrote about this calculation in one article (in revision). In my case I calculate for exclusive breastfeeding.

For current status data, the first step was to obtain a distribution of infants by three age range (0 to 1.9 months, 2 to 3.9 months and 4 to 5.9 months). The distribution was smoothed by a moving average of three groups (previous, current and following value of the distribution) and divided by 3. The second step was to calculate the percentages of infants classified as exclusively breastfed in each age range. The third step was to calculate the median of exclusive breastfeeding by linear interpolation between the midpoint of the first age range for which the proportion falls below 50% and next youngest midpoint age range. This procedure is recommended by DHS Guidelines to calculate median for current status data, and by WHO(4). The final equation to calculate the median is described below (Figure 2). The median of exclusive breastfeeding using current status was calculated only for infants under 6 months.

I send the commands in Stata. I calculated the duration country by country. I didn't use loop, but I using the sintaxe that I use, it can be prepared.

First, it is necessary to generate a variable that indicate if each child is or not breastfed at present moment (yes=1 and no=0)
After, you generate a variable about age range (2 months of each interval) and a variable that indicates the situation of breastfeeding (yes/no) by age range
After, you need to collapse the dataset to calculate the moving average and after then the median duration.

```
collapse (count) BF [aw= SAMPLING], by(AGE_RANGE BF_AGE)
reshape wide BF,i(AGE_RANGE)j(BF_AGE)
egen freqtotal=rowtotal(BF_AGE0 BF_AGE1)
gen meanmovel= (freqtotal[_n-1]+freqtotal[_n]+freqtotal[_n+1])/3
replace meanmovel=(BF_AGE0+BF_AGE1) if AGE_RANGE==1
replace meanmovel=(BF_AGE0+BF_AGE1) if AGE_RANGE==  (PUT THE LAST VALUE OF INTERVAL)
gen meanmovelBF= (BF_AME1[_n-1]+BF_AME1[_n]+BF_AME1[_n+1])/3
replace meanmovelBF=BF_AME1 in 1
replace meanmovelBF = BF_AME1 in 6 (PUT THE LAST VALUE OF INTERVAL)
gen freqBF=BF_AME1/meanmovelBF
```

After you calculate the median duration using formule available at publication of WHO (annex 5).

I don't know if the information is easy to understand.